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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,303	10/06/2003	Katsutoshi Tsuchiya	A8319.0025/P025	4125
24998	7590 10/18/20	95	EXAM	IINER
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP 2101 L Street, NW			GABOR, OTILIA	
Washington, DC 20037		ART UNIT	PAPER NUMBER	
_			2884	

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Off: - A . 1' O	10/678,303	TSUCHIYA ET AL.					
Office Action Summary	Examiner	Art Unit					
	Otilia Gabor	2878					
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with t	he correspondence address					
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perior.  - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICAT 1.136(a). In no event, however, may a reply d will apply and will expire SIX (6) MONTHS ate, cause the application to become ABAND	FION. be timely filed from the mailing date of this communication. DONED (35 U.S.C. § 133).					
Status							
1)⊠ Responsive to communication(s) filed on <u>06</u>	October 2003.						
· · · · · · · · · · · · · · · · · · ·	is action is non-final.						
<i>'</i> —	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under	·	·					
Disposition of Claims							
4)⊠ Claim(s) <u>1-21</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-21</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and	or election requirement.						
Application Papers							
9) The specification is objected to by the Examin	oor						
10) ☐ The specification is objected to by the Examination is objected to be a simple to be		cted to by the Evaminer					
Applicant may not request that any objection to the		•					
Replacement drawing sheet(s) including the corre							
11) The oath or declaration is objected to by the l	•						
Priority under 35 U.S.C. § 119							
12)⊠ Acknowledgment is made of a claim for foreig a)⊠ All b) Some * c) None of:	gn priority under 35 U.S.C. § 11	9(a)-(d) or (f).					
<ol> <li>Certified copies of the priority docume</li> </ol>	1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the pri	•	ceived in this National Stage					
application from the International Bure							
* See the attached detailed Office action for a list	st of the certified copies not rec	eived.					
Attachment(s)							
1) X Notice of References Cited (PTO-892)	4) Interview Sumr	mary (PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/M	ail Date					
<ol> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date <u>03/04,01/04</u>.</li> </ol>	8) 5) Notice of Inform 6) Other:	mal Patent Application (PTO-152)					
		<u> </u>					

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#### **DETAILED ACTION**

#### **Drawings**

1. Figures 25, 26A and 26B should be designated by a legend such as --Prior Art--because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art (Figs. 25, 26A, 26B) and further in view of Motomura Nobuatsu et al. (JP 9-236666) and Kammeraad et al. (U. S. Patent 6,207,957).

Motomura discloses a radiation detector for imaging, the device comprising: a radiation shield (1) for shielding radiation, the shield being conductive (lead) and having a plurality of through holes (3b); at least one radiation detector element (5), each element disposed in the through holes (3b); an element holder (7) for detachably holding the radiation detector element (5) where the radiation detector includes a semiconductor element for receiving incident radiation. Motomura fails to disclose in detail the radiation element, however since it is a semiconductor detector it would have been obvious to use the semiconductor detector of Kammeraad et al., since the coaxial electrode semiconductor detector arrangement of Kammeraad et al. greatly enhances the position certainty of the radiation interaction with the semiconductor, and reduces scattered radiation reading. Kammeraad et al. discloses a radiation detector where the semiconductor element (16) covers the rod-shaped first electrode (12) and the second electrode (15) is disposed at an external surface of the semiconductor element (16), where the first electrode is projected from an edge surface of the semiconductor device where the second electrode is not provided (See Fig.1). Motomura fails to clearly disclose the integrated circuit signal processing, however it would have been obvious to one having ordinary skill in the art to use the integrated circuit arrangement with the first Art Unit: 2878

and second electric connections that connect the first and second electrodes to the signal processing circuit of the admitted prior art (first electrode is connected to an electrical connecting portion (46c) and the second electrode is connected to the radiation shield), since it is a well known and used effective signal processing arrangement.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Otilia Gabor whose telephone number is 571-272-2435. The examiner can normally be reached on Monday, Thursday-Friday between 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Otilia Gabor Primary Examiner Art Unit 2878

OTILIA GABOR PRIMARY EXAMINER